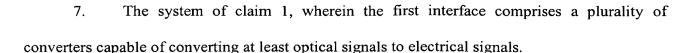
What is claimed is:

1. A system for processing signals, comprising:

a multiplexer, the multiplexer having a first interface to a plurality of broadband signal inputs and a second interface to a bus, the multiplexer multiplexing the broadband signal inputs according to a frequency allocation associating each of the broadband signal inputs with an assigned frequency; and

at least a first receiver unit, the first receiver unit communicating with the bus and decoding the multiplexed broadband signal inputs for communication with a data network.

- 2. The system of claim 1, further comprising a second receiver unit, the second receiver unit having a third interface to the bus and being operative to decode the multiplexed broadband signal inputs when activated.
- 3. The system of claim 2, wherein the second receiver unit is activated upon detection of a fault condition.
- 4. The system of claim 3, wherein each of the first receiver unit and the second receiver unit comprises a plurality of individual receiver modules, each of the individual receiver modules being tunable to a selected frequency, and the activation of the second receiver unit comprises tuning at least one of the individual receiver modules of the second receiver unit to an assigned frequency for a corresponding failed one of the individual receiver modules in the first receiver.
- 5. The system of claim 4, wherein the broadband signal inputs comprise at least cable television modem signals.
- 6. The system of claim 1, wherein the data network comprises a connection to the Internet.



- 8. The system of claim 1, wherein the broadband signal inputs comprise at least one of Internet Protocol data, telephony data, and video data.
- 9. The system of claim 4, wherein each of the individual receiver modules is selectively mappable to at least one other of the individual receiver modules.
 - 10. The system of claim 1, wherein the bus comprises a single physical connection.
 - 11. A method for processing signals, comprising:
- a) multiplexing a plurality of broadband signal inputs received via a first interface in a multiplexer unit to a bus, the multiplexing being done according to a frequency allocation associating each of the broadband signal inputs with an assigned frequency; and
- b) decoding the multiplexed broadband signal inputs in first receiver unit communicating with the bus for communication with a data network.
- 12. The method of claim 11, further comprising a step of c) providing a second receiver unit, the second receiver unit having a third interface to the bus and being operative to decode the multiplexed broadband signal inputs when activated.
- 13. The method of claim 12, further comprising a step of d) activating the second receiver unit upon detection of a fault condition.
- 14. The method of claim 13, wherein each of the first receiver unit and the second receiver unit comprises a plurality of individual receiver modules, each of the individual receiver modules being tunable to a selected frequency, and the activation of the second receiver unit comprises a step of e) tuning at least one of the individual receiver modules of the second

receiver unit to an assigned frequency for a corresponding failed one of the individual receiver modules in the first receiver.

- 15. The method of claim 14, wherein the broadband signal inputs comprise at least cable television modem signals.
- 16. The method of claim 11, wherein the data network comprises a connection to the Internet.
- 17. The method of claim 11, wherein the first interface comprises a plurality of converters capable of converting at least optical signals to electrical signals.
- 18. The method of claim 11, wherein the broadband signal inputs comprise at least one of Internet Protocol data, telephony data, and video data.
- 19. The method of claim 14, wherein each of the individual receiver modules is selectively mappable to at least one other of the individual receiver modules.
 - 20. The method of claim 1, wherein the bus comprises a single physical connection.